What is claimed is:

1. A refractive index coupling distributed feedback semiconductor laser comprising a phase-shift structure, wherein when viewed from an almost central portion in a light distributed feedback direction in a region in which diffraction gratings are formed, an average coupling coefficient $\kappa 2$ of a diffraction grating on one end face side is smaller than an average coupling coefficient $\kappa 1$ of a diffraction grating on other end face side, and the coupling coefficient $\kappa 2$ exceeds 100 cm^{-1}.

2. A complex coupling distributed feedback semiconductor laser of a complex coupling type in which an absolute value of a real part of a coupling coefficient is four or more times an absolute value of an imaginary part of the coupling coefficient, comprising a phase-shift structure, wherein when viewed from an almost central portion in a light distributed feedback direction in a region in which diffraction gratings are formed, an average coupling coefficient $\kappa 2$ of a diffraction grating on one end face side is smaller than an average coupling coefficient $\kappa 1$ of a diffraction grating on other end face side, and the coupling coefficient $\kappa 2$ exceeds 100 cm^{-1}.

3. A distributed feedback semiconductor laser according to claim 1 , wherein a plurality of phase-shift structures is formed at almost symmetrical positions about a central portion in a light distributed feedback direction in a region in which diffraction gratings are formed.

4. A distributed feedback semiconductor laser according to claim 1, wherein a phase-shift structure is formed at an almost central portion in a light distributed feedback direction in a region in which diffraction gratings are formed.

5. A distributed feedback semiconductor laser according to claim 1 , wherein when a cycle of a diffraction grating is represented by Λ, a sum of phase-shift amounts given by all the phase-shift structures is almost $\Lambda/2$.

6. A distributed feedback semiconductor laser according to claim 1 , wherein when a cycle structure of the diffraction grating is viewed in a light distributed feedback direction, a value of (duty of a high refractive index portion)/(duty of a low refractive index portion) in a region of the coupling coefficient $\kappa 1$ is set to be larger than a value in a region of the coupling coefficient $\kappa 2$.

7. A distributed feedback semiconductor laser according to claim 1 , wherein in a layer structure having a high refractive index of in the diffraction grating, the number of high refractive index layers of the coupling coefficient $\kappa 1$ is set to be larger than the number of high refractive index layers of the coupling coefficient $\kappa 2$.

8. A distributed feedback semiconductor laser according to claim 1 , wherein the thickness of a layer of a low refractive index existing between a layer of a high refractive index in the diffraction grating and the active layer is set to be smaller in the region of the coupling coefficient $\kappa 1$ than in the region of the coupling coefficient $\kappa 2$.

9. A distributed feedback semiconductor laser according to claim 1 , wherein when an equivalent refractive index acting when light is propagated through the region of the coupling coefficient $\kappa 2$ is represented by n2, an equivalent refractive index acting when light is propagated through the region of the coupling coefficient $\kappa 1$ is represented by n1, an average cycle of the diffraction grating in the region of the coupling coefficient $\kappa 2$ is

represented by $\Lambda 2$, and an average cycle of the diffraction grating in the region of the coupling coefficient $\kappa 1$ is represented by $\Lambda 1$, $n2 \cdot \Lambda 2$ is almost equal to $n1 \cdot \Lambda 1$.